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	Filing Date	2006-08-04
	First Named Inventor Uri BANIN	
	Art Unit	
	Examiner Name	
	Attorney Docket Number	BANIN4B

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/J.D./	1	20020175408	A1	2002-11	-28	Arun MAJUMD	AR et al.			
/J.D./	2	20030010987	A1	2003-01	-16	Uri BANIN et a	ıl.			
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/J.D./	1	03054953	wo		A1	2003-07-03	The Regents of The University of Califo al.			

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/J.D./	2	03097904	wo	A1	2003-11-27	Yissum Research Development Co. of The Hebrew Univ		
/J.D./	3	9106036	wo	A1	1991-05-02	Research Corporation Technologies, Inc.		
/J.D./	4	0229140	wo	A1	2002-04-11	The Board of Trustees of The Univ. of Arkansas		
/J.D./	5	02079514	wo	A1	2002-10-10	The Trustees of Boston College		
/J.D./	6	03091458	wo	A1	2003-11-06	The Penn State Research Foundation		
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			NON-P	ATENT LIT	TERATURE DO	OCUMENTS		
Examiner Initials*								
/J.D./	1		BANIN, Uri, et al., "Tunnelling and Optical Spectroscopy of Semiconductor Nanocrystals", Annu. Rev. Phys. Chem., 2003, vol. 54, pp. 465-492.					
/J.D./	2	BRAUN, Erez, et a February 19, 1998	BRAUN, Erez, et al., "DNA-templated assembly and electrode attachment of a conducting silver wire", Nature, February 19, 1998, vol. 391, pp. 775-778.					
/J.D./	3	COUCOUVANIS, Chemistry, 1970, v	COUCOUVANIS, Dimitri, "The Chemistry of the Dithioacid and 1, 1-Dithiolate Complexes", Progress in Inorganic Chemistry, 1970, vol. 11, Interscience Publishers, New York, pp. 234-235.					
/J.D./	4	CRETIER, J.E., et 8, pp. 1427-1430.	CRETIER, J.E., et al., "The Crystal Structure of the Beta Form of Gold Selenide, β-AuSe.", Mat. Res. Bull., 1973, vol. B, pp. 1427-1430.					

Receipt date:	08	/16/2007
<b>INFORMATIO</b>	NC	ISCLOSURE
STATEMENT	BY	<b>APPLICANT</b>

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First Named Inventor Uri BA		ANIN	
Art Unit			
Examiner Name			
Attorney Docket Number		BANIN4B	

			-
/J.D./	5	CUI, Yi, et al., "Functional Nanoscale Electronic Devices Assembled Using Silicon Nanowire Building Blocks", Science, February 2, 2001, vol. 291, pp. 851-853.	
/J.D./	9	DUMESTRE, F., et al., "Superlattices of Iron Nanocubes Synthesized from Fe[N(SiMe3)2]2", Science, February 6, 2004, vol. 303, pp. 821-823.	
/J.D./	7	FAN, Chunhai, et al., "Beyond superquenching: Hyper-efficient energy transfer from conjugated polymers to gold nanoparticles", PNAS, May 27, 2003, vol. 100, no. 11, pp. 6297-6301.	
/J.D./	8	GOLDBERGER, Joshua, et al., "Single-crystal gallium nitride nanotubes", Nature, April 10, 2003, vol. 422, pp. 599-601.	
/J.D./	9	GOMEZ, Silvia, et al., "Gold nanoparticles from self-assembled gold(I) amine precursors", Chem. Commun., 2000, pp. 1945-1946.	
/J.D./	10	GUDIKSEN, Mark S., et al., "Growth of nanowire superlattice structures for nanoscale photonics and electronics", Nature, February 7, 2002, vol. 415, pp. 617-620.	
/J.D./	11	HEINZE, S., et al, "Carbon Nanotubes as Schottky Barrier Transistors", Physical Review Letters, September 2, 2002, vol. 89, no. 10, pp. 106801.1-106801.4.	
/J.D./	12	JAVEY, Ali, et al., "Ballistic carbon nanotube field-effect transistors", Nature, August 7, 2003, vol. 424, pp. 654-657.	
/J.D./	13	JIN, R., et al., "Photoinduced Conversion of Silver Nanospheres to Nanoprisms", Science, November 30, 2001, vol. 294, pp. 1901-1903.	
/J.D./	14	JONES, R.M., et al., "Building highly sensitive dye assemblies for biosensing from molecular building blocks", PNAS, December 18, 2001, vol. 98, no.26, pp. 14769-14772.	
/J.D./	15	KAN, S., et al., "Synthesis and size-dependent properties of zinc-blende semiconductor quantum rods", Nature Materials, March 2003, vol. 2, pp. 155-158.	

Receipt date:	08	/16/2007
INFORMATIO	<b>N</b> E	DISCLOSURE
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Art Unit						
Examiner Name						
Attorney Docket Number		BANIN4B				

/J.D./	16	KEREN, K., et al., "DNA-Templated Carbon Nanotube Field-Effect Transistor", Science, November 21, 2003, Vol. 302, pp. 1380-1382.	
/J.D./	17	KLEIN, D, et al., "A single-electron transistor made from a cadmium selenide nanccrystal", Nature, October 16, 1997, vol. 389, pp. 699-701.	
/J.D./	18	MANNA, L., et al., "Controlled growth of tetrapod-branched inorganic nanocrystals", Nature Materials, June 2003, vol. 2, pp. 382-385.	
/J.D./	19	MANNA, L., et al., "Synthesis of Soluble and Processible Rod-, Arrow-, Teardrop-, and Tetrapod-Shaped CdSe Nanocrystals", J. Am. Chem. Soc., 2000, vol. 122, pp. 12700-12706.	
/J.D./	20	MOKARI, T., et al., "Synthesis and Properties of CdSe/ZnS Core/Shell Nanorods", Chem. Mater., 2003, vol. 15, pp. 3955-3960.	
/J.D./	21	MURRAY, C.B., et al., "Synthesis and Characterization of Nearly Monodisperse CdE (E=S, Se, Te) Semiconductor Nanocrystallites", J. Am. Chem. Soc., 1993, vol. 115, pp. 8706-8715.	
/J.D./	22	NAHUM, E., et al., "Transport and Charging in Single Semiconductor Nanocrystals Studied by Conductance Atomic Force Microscopy", Nano Letters, 2004, vol. 4, no. 1, pp. 103-108.	
/J.D./	23	PENG, X. et al., "Shape control of CdSe nanocrystals", Nature, March 2000, vol. 404, pp. 59-61.	
/J.D./	24	PENG, Z, et al., "Mechanisms of the Shape Evolution of CdSe Nanocrystals", J. Am. Chem. Soc., 2001, vol. 123, pp. 1389-1395.	
/J.D./	25	TALAPIN, D. et al., "Highly Emissive Colloidal CdSe/CdS Heterostructures of Mixed Dimensionality", Nano Letters, 2003, vol. 3, no. 12, pp. 1677-1681	
/J.D./	26	TANG, Z. et al., "Spontaneous Organization of Single CdTe Nanoparticles into Luminescent nanowires", Science, July 12, 2002, vol. 297, pp. 237-240.	

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Receipt date:	08/16/2007
INFORMATIO	N DISCLOSURE
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Art Unit				
Examiner Name				
Attorney Docket Number		BANIN4B		

/J.D.	/27	WU, Y. et al., "Block-by-Block Growth of Single-Crystalline Si/SiGe Superlattice Nanowires", Nano Letters, 2002, vol. 2, no. 2, pp. 83-86.	
/J.D./	28	YAMAMOTO, M. et al., "Novel preparation of monodispersed silver nanoparticles via amine adducts derived from insoluble silver myristate in tertiary alkylamine", J. Mater. Chem., 2003, vol. 13, pp. 2064-2065.	
/J.D./	29	YAN, H. et al., "DNA-Templated Self-Assembly of Protein Arrays and Highly Conductive Nanowires", Science, September 26, 2003, vol. 301, pp. 1882-1884.	
/J.D./	30	YU, W. et al., "Formation and Stability of Size-, Shape-, and Structure-Controlled CdTe Nanocrystals: Ligand Effects on Monomers and Nanocrystals", Chem. Mater., 2003, vol. 15, pp. 4300-4308.	
/J.D <i>.</i> /	31	Affredo M. MORALES et al., "A LASER ABLATION METHOD FOR THE SYNTHESIS OF CRYSTALLINE SEMICONDUCTOR NANOWIRE", Science, Vol. 279, January 9, 1998, pages 208-211	
/J.D./	32	Wendy U. HUYNH et al., "HYBRID NANOROD-POLYMER SOLAR CELLS", Reports, Science, Vol. 295, March 29, 2002, pages 2425-2427	
/J.D./	33	MIRI KAZES et al., "LASING FROM SEMICONDUCTOR QUANTUM RODS IN A CYLINDRICAL MICROCAVITY", aDV. mATER. 2002, Vol. 14, No. 4 pages 317-321	
/J.D./	34	GUANGTAO LI et al., "Spherical and Planar Gold(0) Nanoparticles with a Rigid Gold(I)-Anion or a Fluid Gold(0)-Acetone Surface", 2003 American Chemical Society, Vol .19 pages 6483-6491	
/J.D./	35	R. KRUPKE et al., "Contacting single bundles of carbon nanotubes with altering electric fields", Applied Physics A, Materials Science & Processing, October 28, 2002, pages 397-400	
/J.D./	36	MICHAL JACOBSON et al., "SIZE DEPENDENCE OF SECOND HARMONIC GENERATION IN CDSE NANOCRYSTAL QUANTUM DOTS", Depart. of Physical Chemistry and the Farkas Center for Light-Induced Processes, The Hebrew University of Jerusalem, Vol. 104, No. 1, January 13, 2000	
/J.D./	37	W. RECHBERGER et al., "OPTICAL PROPERTIES OF TWO INTERACTING GOLD NANOPARTICLES", Optics Communications, Vol. 220, 2003, pages 137-141	

Receipt date	: 08/16/2007
INFORMATIO	IN DISCLOSURE
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/J.D./	38	C. SONNICHSEN et al., "DRASTIC REDUCTION OF PLASMON DAMPING IN GOLD NANORODS", Photonics and Optoelectronics Group, Physics Depart. and CeNSVol. 88, No. 7, February 18, 2002, pages 1-4					
/J.D./	39	R. SOLANKI et al., "Atomic Layer deposition of ZnSe/CdSe superlattice Nanowires", Applied Physics Letters, Vol. 61, No. 20, November 11, 2002, pages 3864-3866					
/J.D./	40		TALEB MOKARI et al., "Selective Growth of Metal Tips onto Semiconductor Quantum Rods and Tetrapods", Reports, Vol. 304, June 18, 2004, pages 17871790				
/J.D./	41	YOUNG-WOOK JUN et al., "Controlled Synthesis of Multi-armed CdS Nanorod Architectures Using Monosurfactant System", J. Am. Chem. Soc. 2001, Vol. 123, pages 5150-5151					
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